

SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 00232/194001	SERIAL NO. 09/292,152
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		APPLICANT Michael A. Fischer			
(37 CFR 1.98(b))		FILING DATE April 15, 1999		GROUP 3752	

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AL							
	AM							
	AN							
	AO							
	AP							

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

SN	AQ	National Fire Protection Association. NFPA 13 - Standard for the Installation of Sprinkler Systems (1996 edition), pp 13-1 through 13-148.
SN	AR	National Fire Protection Association. NFPA 231 - Standard for General Storage (1998 edition), pages 231-1 through 231-31.
SN	AS	National Fire Protection Association. NFPA 231C - Standard for Rack Storage of Materials (1998 edition), pages 231C-1 through 231C-75.

EXAMINER Dinh Q. NGUYEN

DATE CONSIDERED

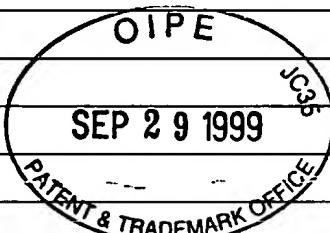
1/19/00

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 00232/194001	SERIAL NO. 09/292,152
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		APPLICANT Michael A. Fischer			
(37 CFR 1.98(b))		#6		FILING DATE April 15, 1999	GROUP 3752

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER		ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA							
	AB							
	AC							
	AD							
	AE							
	AF							
	AG							
	AH							
	AI							
	AJ							
	AK							



## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
QW	AL	WO 98/18525	05/1998	WIPO [corresponds to US 5,829,684]	A62C	31/02	ENG	
	AM							
	AN							
	AO							
	AP							

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	AQ	Search Report under Section 17, issued by GB Patent Office for corresponding GB Patent Application No.
		9911294.8 (dated 24 August 1999).
	AR	
	AS	

EXAMINER DINH Q. NGUYEN DATE CONSIDERED 2/08/00

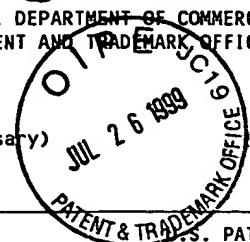
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

RECEIVED  
OCT - 5 1999  
TECHNOLOGY CENTER 3700

SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 00232/194001		SERIAL NO. 09/292,152							
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		O SEP 20 1999 PATENT & TRADEMARK OFFICE		APPLICANT Michael A. Fischer									
(37 CFR 1.98(b))				FILING DATE April 15, 1999		GROUP 3752							
U.S. PATENT DOCUMENTS <span style="float: right;">#5</span>													
EXAMINER INITIAL		PATENT NUMBER			ISSUE DATE	PATENTEE		CLASS	SUBCLASS	FILING DATE IF APPROPRIATE			
AN	AA	5	6	8	7	9	1	4	11/18/97	Bosio et al.	239	498	
AN	AB	5	8	3	9	6	6	7	11/24/98	Fischer	169	37	
AN	AC	5	8	6	2	9	9	4	01/26/99	Pounder et al.	239	498	
AN	AD	5	8	6	5	2	5	6	02/02/99	Pounder	169	37	
AN	AE	5	8	9	0	6	5	7	04/06/99	Ponte	239	498	
	AF												
	AG												
	AH												
	AI												
	AJ												
	AK												
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION													
		DOCUMENT NUMBER		PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION					
								YES	NO				
	AL												
	AM												
	AN												
	AO												
	AP												
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)													
	AQ												
	AR												
	AS												
EXAMINER <u>DINH Q. NGUYEN</u>						DATE CONSIDERED <u>7/08/00</u>		RECEIVED SEP 24 1999 TECHNOLOGY CENTER 3700					
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.													

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
00232/194001SERIAL NO.  
09/292,152INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT  
(Use several sheets if necessary)

(37 CFR 1.98(b))

APPLICANT  
Michael A. FischerFILING DATE  
April 15, 1999GROUP  
3752

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER					ISSUE DATE	PATENTEE		CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DN	AA	5	9	1	5	4	7	9	06/29/99	G.W. Ponte	169	46
	AB											
	AC											
	AD											
	AE											
	AF											
	AG											
	AH											
	AI											
	AJ											
	AK											

1C 3700 MAIL ROOM  
JUL 28 1999  
RECEIVED

## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AL							
	AM							
	AN							
	AO							
	AP							

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	AQ							
	AR							
	AS							

EXAMINER DINH Q. NGUYEN

DATE CONSIDERED

11/12/00

RECEIVED  
AUG 10 1999  
TECHNOLOGY CENTER 3700

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 00232/194001	SERIAL NO. 09/292,152
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)  (37 CFR 1.98(b))		APPLICANT Michael A. Fischer			
		FILING DATE April 15, 1999		GROUP 3752	

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER					ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DN	AA	7	2	0	0	1	3	02/10/03	Esty		
DN	AB	1	1	6	5	3	1	12/21/15	Bower		
DN	AC	2	8	6	2	5	6	12/02/58	Dukes		
DN	AD	4	2	9	6	8	1	10/27/81	Mears		
DN	AE	4	2	9	6	8	1	10/27/81	Fischer		
DN	AF	4	5	8	0	7	2	04/08/86	Pounder	JUN - 7 1999	JUN 10 1999
DN	AG	4	9	0	1	7	9	02/20/90	Pepi et al.		
DU	AH	5	1	5	2	3	4	10/06/92	Fischer et al.		TECHNOLOGY CENTER 3700
DO	AI	5	5	8	4	3	4	12/17/96	Meyer et al.		
DN	AJ	5	8	2	9	5	3	11/03/98	Meyer et al.		
	AK										



RECEIVED

## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AL							
.	AM							
.	AN							
.	AO							
	AP							

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

AQ		
AR		
AS		

EXAMINER DINH Q. NGUYEN

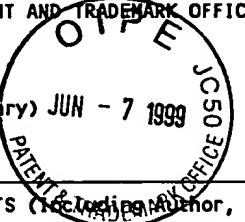
DATE CONSIDERED

2/08/00

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE						ATTY. DOCKET NO. 00232/194001	SERIAL NO. 09/292,152		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)								APPLICANT Michael A. Fischer			
								FILING DATE April 15, 1999	GROUP 3752		
U.S. PATENT DOCUMENTS											
EXAMINER INITIAL		PATENT NUMBER				ISSUE DATE	PATENTEE		CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AN	BA	3	5	2	5	4	0	2	08/1970	Hattori	
	BB	3	6	5	3	4	4	4	04/1972	Livingston	
	BC	3	6	8	2	2	5	1	08/1972	Livingston	
	BD	3	7	2	2	5	9	6	03/1973	Livingston	
	BE	3	7	6	8	7	3	6	10/1973	Cox	
	BF	3	8	1	2	9	1	5	05/1974	Livingston	
	BG	3	8	8	8	3	1	3	06/1975	Freeman	
	BH	3	9	0	4	1	2	6	09/1975	Allard	
	BI	4	0	9	1	8	7	3	05/1978	Werner	
	BJ	4	0	9	9	6	7	5	07/1978	Wohler et al.	
	BK	4	1	3	6	7	4	0	01/1979	Groos et al.	
	BL	4	2	7	9	3	0	9	07/1981	Fischer et al.	
	BM	4	4	0	5	0	1	8	09/1983	Fischer	
	BN	4	6	5	7	0	8	5	04/1987	Jacobsen	
	BO	4	8	0	0	9	6	1	01/1989	Klein	
.	BP	4	9	3	0	5	7	8	06/1990	Barnett et al.	
	BQ	5	0	3	6	9	2	3	08/1991	Shea	
	BR	5	0	9	4	2	9	8	03/1992	Polan	
	BS	5	3	6	6	0	2	2	11/1994	Meyer et al.	
	BT	5	5	7	9	8	4	6	12/1996	Meyer et al.	
	BU	5	6	0	9	2	1	1	03/1997	Meyer et al.	
AN	BV	5	6	6	4	6	3	0	09/1997	Meyer et al.	
	BW										
	BX										
	BY										
EXAMINER <u>DINTT Q. NGUYEN</u>								DATE CONSIDERED <u>2/08/00</u>			

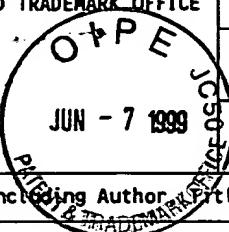
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE 	ATTY. DOCKET NO. 00232/194001	SERIAL NO. 09/292,152
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) JUN - 7 1999 (37 CFR 1.98(b))		APPLICANT Michael A. Fischer		
		FILING DATE April 15, 1999		RECEIVED GROUP 102
OTHER DOCUMENTS (Excluding this Application, Author, Title, Date, Place of Publication) <span style="float: right;">JUN 10 1999</span>				
AN	CA	Underwriters Laboratories Inc., UL 1767, "Standard for Safety, Early-Suppression Fast-Response Sprinklers", First Edition, Feb. 1990		
	CB	Factory Mutual Engineering Corp., "Loss Prevention Data 2-2, Early Suppression Fast Responses Sprinklers", April 1987		
	CC	Factory Mutual Research, "Approval Standard, Early Suppression Fast Response Automatic Sprinklers", June 1986		
	CD	"Automatic" Sprinkler Corporation of America product sheets entitled "Automatic ESFR Glass Bulb Sprinkler", Feb. 1988 (pp. J 5.3, J 5.4)		
	CE	ASCOA First Systems data sheets entitled "Automatic ESFR Glass Bulb Sprinkler", March 1992 (pp. 1.1, 1.2)		
	CF	Grinnell Corporation data sheets entitled "Early Suppression Fast Response Sprinklers/Model ESFR-1 Pendent, 14.3 K-Factor", April 1988		
	CG	Reliable Automatic Sprinkler product announcement, "ESFR Model H Early Suppression Fast Response Sprinklers", Oct. 1992 (3 pp. total)		
	CH	Central Sprinkler Company catalog sheets entitled "Central ESFR-1 3-93/ESFR Early Suppression Fast Response", March 1993 (4 pp)		
	CI	Drawing entitled, "International Jumbo Sprinkler Head--Deflector", DWG. No. 1-117, Automatic Sprinkler Co. of America, Mar. 1926 (1 pg)		
	CJ	Sheet entitled "Grinnell Jumbo Sprinkler Issue A", Grinnell Corp., Feb. 1969 (1 pg)		
	CK	Drawing entitled "Solder-Type--Issue A 1/14" Grinnell Jumbo Sprinkler Yoke, Body, Strut, Diaphragm and Disc", General Fire Extinguisher Company, April 1917 (1 pg)		
	CL	Drawing entitled "1" Grinnell Jumbo Sprinkler Detail Solder Type Issue 'A", General Fire Extinguisher Co., April 1917 (1 pg)		
	CM	NJ Thompson, Fire Behavior and Sprinklers, Chapter 6 "Automatic Sprinkler Protection", National Fire Protection Association, 1964, Foreward, Table of Contents (pp. 72-91)		
AN	CN	Newsletter for Fire Protection Engineers and Industry, No. 11, July 1968, Orinda, California (8 pp)		
EXAMINER <u>Dinh Q. Nguyen</u>		DATE CONSIDERED <u>7/08/00</u>		

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
00232/194001SERIAL NO.  
09/292,152INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT  
(Use several sheets if necessary)

(37 CFR 1.98(b))

APPLICANT  
Michael A. FischerFILING DATE  
April 15, 1999RECEIVED  
GROUP 10 1999

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

TECHNOLOGY CENTER 3700

<i>AN</i>	DA	D.G. Goodfellow et al., Technical Report entitled "Optimization of Sprinkler Protection for United States Postal
		Postal Service III. Protection of Plastic Letter Trays", Factory Mutual Research Corp., Oct. 1971 (39 pp)
	DB	D.G. Goodfellow, Technical Report entitled "Optimization of Sprinkler Protection for United States Postal
		Facilities/IV Protection of Plastic Letter Trays with 0.64--in. Retrofit Sprinklers, Factory Mutual Research Corporation, July 1974 (30 pp. with cover and introductory pages)
	DC	E.W.J. Troup, Technical Report entitled "New Developments in Ceiling--Level Protection for the High-Challenge Fire", Factory Mutual Research Corporation, Jan. 1974
		P.J. Chicarello et al., Technical Report entitled "Large-Scale Fire Test Evaluation of Early Suppression
	DI	Fast Response (ESFR) Automatic Sprinklers", Factory Mutual Research Corp., May 1986 (cover-p. 18-pp.122-128)
		C. Yao, "The Development of the ESFR Sprinkler System", First Safety Journal, Elsevier Scientific Ltd., Kidlington, Oxford, U.K., 1988, Vol. 14, No. 11 (pp. 65-73)
	DF	C. Yao, "Overview of FMRC's Sprinkler Technology Research", Factory Mutual Research Corporation, May 1992
	DG	Approved Product News, Factory Mutual Engineering Corp., Vol. 4, No. 2, Dec. 1988 (pp. 1-5, 8-12, 16)
	DH	Fire Protection Handbook, 17th Edition, National Fire Protection Association, 1991, Title page, inner page,
		Table of Contents, p. IX and pp. 5-127 through 5-163 and 5-174 through 5-197)
	DI	K. Bell, "Presentation to American Fire Sprinkler Association--Large K-Factor Sprinklers", Nov. 1992 (59 pp. total: 19 pp. text and 40 pp. slide photocopies)
		Color photocopies of six color photographs of sprinkler case with "I.S. Co." on deflector and PAT.03 on the body and 1903 stamped on the release link (labeled June 1995) (2 pp.)
	DK	Color photocopies of six color photographs of sprinkler case with "Globe" and 280 on body, G A S Co. on deflector and stamped 1926 on release ink (labeled June 1995) (2 pp.)
		Color photocopies of five color photographs of Grinnell Corporation "Jumbo A" automatic sprinkler--1 1/4" orifice, (labeled June 1995) (2 pp.)
<i>AN</i>	DM	Color photocopies of five color photographs of Grinnell Corporation, "Jumbo A" automatic sprinkler--1" orifice, (labeled June 1995) (2 pp.) (body painted red)
	DN	

EXAMINER *Dinh Q. Nguyen*DATE CONSIDERED *2/08/00*

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.